SOFTWARE IMPLEMENTATION OF A REAL-TIME MONITORING ANDCONTROLLING SYSTEM FOR THREE-PHASE INDUCTION MOTOR USING ZIGBEE AND IOT

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ABSTRACT

A Real time remote monitoring and controlling wireless system for three-phase induction motor using the Zigbee communication protocol and IOT is realized. The designed Graphics User Interface (GUI) installed in the main PC allows local or remote user to monitor the three-phase induction motor parameters and can be started/stopped locally using ZigBee protocol or remotely from anywhere around the world using IOT. This study complements the Hardware Implementation of a Real Time Monitoring and Controlling System for Three-Phase Induction Motor Using ZigBee and IOT study. A Low-level code for handling sensors data from the two Nodes to the main Node using ZigBee protocol is designed. Also, a GUI for the presents of motor parameters, Starts/Stops the motor, saves the motor parameters in Microsoft Access database file and Requests/Gets data and commands to/from the cloud is developed.

KEYWORDS: *Zigbee, Xbee, Three Phase Induction Motor, IOT*